COST OF LIVING OF PRIMARY SCHOOL TEACHERS: THE CASE OF LUSAKA PROVINCE

By

Mambwe P. Nakamba (Department of Economics, UNZA)

Economic and Social Development Research Project of the Jesuit Centre for Theological Reflection
Lusaka - Zambia
June 2000

COST OF LIVING OF PRIMARY SCHOOL TEACHERS: THE CASE OF LUSAKA PROVINCE

By

Mambwe P. Nakamba (Department of Economics, UNZA)

Economic and Social Development Research Project of the Jesuit Centre for Theological Reflection
Lusaka - Zambia
June 2000

Table of Contents

Executive Summary

The aim of this study has been to contribute towards improving living conditions of workers in Zambia in an effort to bring about sustainable livelihood and poverty reduction. In particular, the study investigates the effects of the rising cost of living (poverty levels) among primary school teachers in Lusaka Province by assessing their income and expenditure levels. The study also assesses the extent of the relationship of teachers' living conditions and their output. Furthermore, the study investigates policies and practices that inhibit sustainable livelihood and therefore increase poverty among primary school teachers. The study uses a sample of 25 government and private primary schools in Lusaka Province.

The main findings of the study are that incomes earned by teachers in government school were significantly lower than those earned by their colleagues in private schools. However, incomes for teachers in private schools were equally low. Measured against their households' monthly expenditures, many teachers could not afford the barest minimum necessities – food, shelter, transport, etc. The mean monthly net income for teachers was 37.1 percent less than what was required purchase a food basket for a family of six in Lusaka as estimated by the JCTR Food Basket Survey (March 2000). The worst affected were teachers in government schools with their mean monthly net incomes 44.3 percent short of the cost of the Food Basket.

An important revelation from the study was the issue of *'psychic income.'* It was believed that teachers' living conditions are not only dependent on their money incomes but also on the conditions of work. Therefore, things like provision of accommodation, pupil-teachers ratios, number of classes taught, length of vacation, etc., contribute to a teacher's psychic income in that they minimise or eliminate search, time and energy costs. Consequently, teachers who had access to school-provided accommodation, taught fewer classes, had smaller class sizes, and so on, were better placed as regards income.

Despite the fact that teachers qualify for a number of entitlements, such as paid leave, loans and many other allowances including housing and health, very few of them have benefited from these entitlements. In fact it was their major concern that whilst these benefits appear on paper, they are not applied in practice.

Due to the teachers' inability to afford basic necessities, the majority of them have resorted to other survival means in order to cope with the poverty situation. Notably, these are: private tuition, vending, reducing the number of meals per day, asking for help from friends and relatives, and borrowing, both formal and *kaloba* (an informal borrowing with exorbitant interest rates, often exceeding 100.0 percent). Many of these strategies have negative ramifications on the quality of education, as they are likely to distract the teachers from concentrating on their work. For instance, private tuition, while it may be a welcome strategy because of the additional attention devoted to the pupils, may significantly undermine the quality of education if it is conducted to the teachers' own pupils.

Furthermore, the study found a close correlation between teachers' poverty levels and their output. For instance, higher income levels of teachers in schools were closely correlated with higher average pass rates for pupils to secondary school. Also the majority of the teachers reported having lost morale to teach due to their poor living conditions.

The teachers were asked to give their opinions on what they considered would help in improving their living conditions. Whilst the payment of allowances was seen as one of the ways by which the government can alleviate the teachers suffering, many felt that raising salaries is probably the basic and possibly the easiest way of uplifting their living standards, at least in the short-run.

Anecdotes Related to Investing in Education

Several years ago, the President of a small Central American country, Costa Rica, made a very bold and risky decision. He abolished the military services of the country. This brought considerable savings to the national budget. But he then made another bold decision. The expenditures for the military were now diverted to the educational sector and devoted entirely to the improvement of the salaries of teachers.

Improved salaries meant improved teaching. And improved teaching by the teachers meant improved learning by the students. The results of this bold move were dramatic. Today, Costa Rica has one of the highest rates of literacy in the Southern Hemisphere (95%) and ranks 34 on the Human Development Index of the UNDP.

Investment in education is investment in development. Promotion of the basic human right of education not only develops but also develops the country.

The Lesson is clear: when resources, however limited, are put toward the proper priorities, the results are great!

Mr. Peter Mumba, 27, a primary school teacher, takes home K150, 000 after deductions. He lives in crowded premises and rents one room at K25, 000. Mr. Mumba says, " Sometimes I wonder how I survive, my salary cannot take me to the next pay. I can only afford the simplest and cheapest of commodities. I buy food from *Katambalala* (the open market by the street) and my clothes from *Salaula* (second-hand clothes stalls). Zambeef is just a word to me". To supplement his meager salary, Mr. Mumba has joined the bandwagon in running extra tuition classes after normal working hours. This brings in an unsteady K30, 000 to K40, 000 per month. Mr. Mumba opened a bank account only because he needed it for the purpose of receiving his salary. He has no savings though. "How can I save when I am even forced to go for credit facilities just to keep my house going?" he asks. If he could earn something like K250, 000 net pay, Mr. Mumba says he would breathe a lot more comfortably, find decent accommodation in a more decent area and entertain himself and his family more decently. "People wonder why education standards are falling," he says, "but they forget that a teacher cannot entertain himself in a proper way because he has no money to spare. Many teachers have taken to drinking *kachasu* (a very potent illicit brew). The government needs to do something about this situation." – *National Mirror*, May 13-19, 2000

1.0 INTRODUCTION

1.1 Background

Zambia is currently preoccupied with economic liberalization reforms aimed at putting the economy back on a sustainable growth path. Experience shows that the reforms to date have not had their intended positive impact on the living conditions of the Zambian people.

The incidence of poverty amongst the population has been rising. According to the 1998 Living Conditions Survey Preliminary Report of the Central Statistics Office (CSO), 73 percent of the Zambian population live below the poverty line. This represents a 2.9 percent increase from the 1996 poverty level. The general conclusion from the report is that the living conditions in Zambia are not improving. Even the working class in the formal sector are not adequately compensated for their labour, especially those in the civil service and the teaching service. The GRZ Economic Report (1999) further concedes that the earnings of workers in Zambia have continuously been eroded by inflation, with the result that the purchasing power of these earnings has been considerably depleted.

The March, 2000 Food Basket Survey of the Economic and Social Development Research Project of the Jesuit Centre for Theological Reflection (JCTR) estimates that an average household of six (2 adults and 4 children) in Lusaka requires K272, 810 to meet basic food needs. It needs no serious mathematical computation to notice that a primary school teacher who nets K100, 000 per month will be unable to meet the most minimum needs. This high cost of living threatens the attainment of a decent and sustainable livelihood. For the case of primary school teachers, the effect on educational quality of their poor living conditions due to a rising cost of living is profound. The reasoning lies in the consideration that lesson planning and actual teaching can be affected if teachers are hungry. The quality of the teachers' output may also be affected if attention is diverted from lesson planning to engaging into other activities for survival – coping strategies to reduce poverty.

The importance of education in the improvement of living conditions and overall national development needs no emphasis. The challenge, however, lies in also ensuring that the living conditions of the key players in education, those at the point of direct

Private Organisations, the Church, Government and Donors. The exercise has largely focused on Lusaka. Plans are under way to extend the survey to other areas so as to get a wider picture of the rising cost of living in Zambia. However, there has been no particular emphasis on a specific class of workers. In fact, no survey has been conducted to get first hand information on the cost of living from the people themselves. Instead the food basket survey collects information on prices of basic requirements such as mealie meal, meat, chicken, vegetables, sugar, charcoal, etc., and relates this to a family of six members. The food basket does not include other essential household expenses such as electricity, housing, water and transport, as well as education and health care.

Concern has been growing within JCTR to extend the focus to a more detailed survey. This is why the Cost of Living Study initiative was conceived. It is designed to answer questions that the food basket has not been able to address. Therefore pertinent questions to be addressed in this study go beyond the computation of food costs, to include other items' costs. Specifically, primary school teachers have been targeted as the focus group. The reason for selecting teachers is that they play a significant and crucial role in national development in general and in the education system in particular.

1.3 Objectives of the Study

The general objective of the study was to contribute towards improving living conditions of workers in Zambia as an effort to bring about sustainable livelihood and poverty reduction. Specifically, the study aims at achieving the following objectives:

1. To assess the extent of the rising cost of living among primary school teachers (measuring poverty levels) by comparing the average monthly income and average monthly expenditure of individual primary school teachers.
2. To assess the extent of the relationship between the poverty levels of primary school teachers and their output (quality of education).
3. To identify some coping strategies/mechanisms, if any, used by primary school teachers to survive.
4. To identify some policies and practices that inhibit sustainable livelihood and enhance poverty among primary school teachers, and explore ways of influencing changes in policies and practices.

1.4.3 Questionnaires and Data Collection

Two types of questionnaires were used in the study: the Primary School Teachers' questionnaire and the Head Teachers' questionnaire. The primary school teachers' questionnaire was used to collect information from primary school teachers on their demographic and socioeconomic background, employment record, monthly household income and expenditures, and teaching and coping strategies. The Head Teachers' questionnaire was used to collect information from Head Teachers mainly on pupil population and school establishment. Information on other school characteristics like number of streams, sessions, periods per session, and average pass rates to secondary school was collected using the head teachers' questionnaire. All the questionnaires were administered using personal interviews except for one school where this was not possible and therefore the teachers had to fill in questionnaires themselves. (See Appendix B for the questionnaires.)

1.4.4 Data Processing and Analysis

The data from the questionnaires was processed and analysed using the computer software called SPSS for Windows, version 10.0. All the descriptive statistics, cross tabulations, comparison of means, frequencies, test statistics, and charts were compiled using this software.

2.1.1 Sex

According to the table, 68.4 percent of the teachers in rural primary schools were female teachers while 31.6 percent were male teachers. This gives a ratio of female teachers to male teachers of 2:1. A similar picture is also observed for urban primary schools where 61.1 percent were female teachers and 38.9 percent were male teachers. Considering the distribution of sex by school type, for private schools there was an equal proportion of both female and male teachers while for government schools the same 2:1 ratio of female teachers to male teachers is observed. For the whole sample, 63.6 percent were female teachers and 36.4 percent were male teachers. This finding holds even when all the teachers, including those who were not interviewed, in the selected schools are considered. Information on the basis of the Head Teachers' questionnaire shows that 64.0 percent of the total number of teachers in the 25 schools were female teachers while 36.0 percent were male teachers. This is an indication that there are more female primary school teachers than male primary school teachers in Lusaka province. This finding, however, is typical of Lusaka and therefore does not represent the national picture.

2.1.2 Age

The minimum age of primary school teachers in the sample was 22 years and the maximum was 56 years with an average of 34 years. The five-year age group distribution shows that over 50.0 percent of the teachers fell within the 25-34 years age group.

2.1.3 Marital Status and Household Size

On average, about 60.0 percent of the teachers in the sample reported to be married and 15.0 percent were either divorced or widowed. Only about 25.0 percent were never married. Given this finding, the study can safely conclude that the majority of teachers were raising a family. The minimum household size was one person and the maximum house size hold was 15. The average household size was estimated to be 5.97 people per household, which is simply 6 people after rounding off. This corresponds to the average household size used by the Jesuit Centre for Theological Reflection (JCTR) to calculate the Monthly Food Basket (Food Basket Survey, March 2000). This figure therefore forms a basis for comparing some of the findings in this study with the findings of the Food Basket Survey.

2.1.6 Terms of Employment

Table 2.1 shows that 97.8 percent of the teachers in government schools were employed on full time basis with only 2.2 percent employed on part-time basis. For private schools 60 percent were on full time basis, 30 percent were on part time, 6 percent were untrained teachers and 4 percent were on contract. No untrained teachers were reported in all government schools, both rural and urban, even from the complete list of teachers provided in the Head Teachers' questionnaire.

2.1.7 Length of Service

Teachers were asked about the total number of years they had rendered to the teaching service. The minimum and maximum length of service for teachers on the basis of the sample was less than one year and 33 years respectively. The average length of service was 9 years. According to the categories of length of service in Table 2.1, the majority of the teachers in the sample had served for less than 10 years. Only about an average of 5.0 percent had served for 21 years and above. A noticeable result is that 72.0 percent of the teachers from private schools had only served for less than five years. This is because private schools began mushrooming only after the advent of liberalisation in the 1990s.

Table 2.2: Gross Monthly Income by Sex, School Type and School Location (Kwacha)

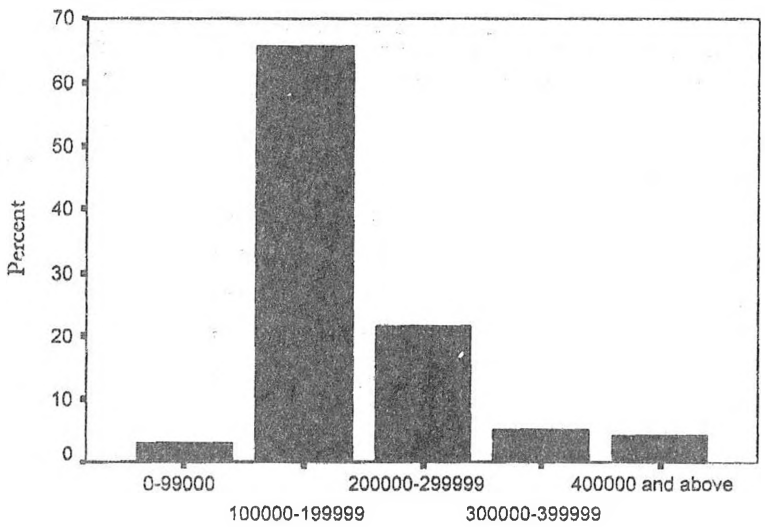
School type	Sex	Mean	Median	Minimum	Maximum
Government	Male	196,807.60	194,000.00	150,000.00	303,000.00
	Female	192,765.63	190,000.00	150,000.00	240,000.00
	Total	194,074.68	194,000.00	150,000.00	303,000.00
Private	Male	282,480.00	280,000.00	80,000.00	650,000.00
	Female	293,750.00	296,500.00	80,000.00	500,000.00
	Total	288,000.00	280,000.00	80,000.00	650,000.00
Total	Male	229,927.23	194,000.00	80,000.00	650,000.00
	Female	209,714.06	194,000.00	80,000.00	500,000.00
	School location				
Government	Rural	200,901.07	194,000.00	152,000.00	303,000.00
	Urban	190,543.78	190,000.00	150,000.00	235,000.00
	Total	194,074.68	194,000.00	150,000.00	303,000.00
Private	Rural	345,000.00	489,000.00	80,000.00	650,000.00
	Urban	257,718.75	280,000.00	80,000.00	380,000.00
	Total	288,000.00	280,000.00	80,000.00	650,000.00
Total	Rural	232,715.12	194,000.00	80,000.00	650,000.00
	Urban	205,068.10	190,000.00	80,000.00	380,000.00
Total		214,529.52	194,000.00	80,000.00	650,000.00

Note: The independent Samples Test for mean differences was conducted and the equal variance not assumed *t*-tests for all means show that mean gross monthly incomes differ markedly between male and female, government and private, and rural and urban (See Appendix D for test results).

Findings of the study also reveal that teachers in rural private schools earned a little bit more than their counterparts in urban private schools. The reason for this is that most rural private schools in the sample were boarding schools and normally fees charged in these schools are high enough to accommodate higher salaries.

Another way of looking at the above analysis is to categorise the gross income levels and analyse the percentage distribution of teachers by income category.

Figure 2.1: Percentage Distribution of Monthly Gross Income



The case of private schools, however, reveals a different picture. Information in table 2.3 shows that there is a correlation between higher incomes and longer teaching services. Therefore, the length of service of a teacher in a private school is important in determining his or her salary as opposed to government schools.

3.1.2 Monthly Net Income

Gross income alone conceals a lot about the teachers' purchasing power. What is really important is how much goes into the teachers' pocket, that is, their disposable income. Therefore, a similar analysis is done using monthly net incomes, that is, gross income minus taxes and statutory contributions. Table 2.4 below presents statistics on net income. According to the information in the table, the mean net income was K171, 639 and the median was K154, 000. The minimum net income was K77, 000 and the maximum was K509, 000. According to the JCTR Food Basket Survey (March 2000), a food basket for a family of six was estimated at K272, 810. Given the above average and median net incomes earned by primary school teachers, it is clear that gross as well as net incomes for primary school teachers were less than what was needed to purchase a food basket in the month of March. Specifically, the mean monthly incomes of primary school teachers were 37.1 percent short of what was required to purchase basic food commodities.

Table 2.4: Monthly Net Income by School Type and School Location (Kwacha)

	Mean	Median	Minimum	Maximum
School type				
Government	151,953.83	152,000.00	100,000.00	208,000.00
Private	241,968.00	237,500.00	77,000.00	509,000.00
School location				
Rural	187,719.01	154,000.00	77,000.00	509,000.00
Urban	163,197.18	154,000.00	80,000.00	321,000.00
Total	171,693.78	154,000.00	77,000.00	509,000.00

Since the food basket does not include housing, water, electricity, fuel, transport, clothing, education, health care and recreation, the shortfall of income in meeting the overall cost of living for primary school teachers is much greater.

Narrowing down the analysis according to school type, the table shows that the worst hit were teachers in government schools with their mean and median incomes of K151, 953 and K152, 000 respectively. This indicates a 44.3 percent shortfall of what is needed to meet the food basket requirement. According to school location, teachers in the urban

From this classification teachers were asked to state what they were entitled to in their current jobs. In addition, they were also asked to state from the given list which of the entitlements they had already benefited from.

According to the findings presented in Table 2.4, 93.8 percent of teachers in government schools, and 60.0 percent of the teachers in private schools reported to be entitled to the standard package of entitlements. Of these 93.7 percent were in rural schools and 82.6 percent were in urban schools. This reveals that the majority of the teachers in the sample were entitled to almost, if not all, of the entitlements under the standard package.

Table 2.5: Distribution of Job Entitlements by Type of School, Location and Length of Service

	School Type		School Location		Length of Service				
	Government	Private	Rural	Urban	0-5	6-10	11-15	16-20	21+
Basic job entitlements	3.9	18.0	5.1	8.1	11.8	7.7	3.0	-	-
Standard job entitlements	93.8	60.0	93.7	82.6	75.3	92.3	97.0	100.0	75.0
None	0.6	12.0	-	4.7	7.5	-	-	-	-
Retired/part-time	1.7	4.0	-	3.4	3.2	-	-	-	16.7
Other	-	6.0	1.3	1.3	2.2	-	-	-	8.3

There was also a larger proportion of teachers in private schools (12.0 percent) compared with government schools (0.6 percent) who were entitled to nothing other than the monthly salary. This is because there was a larger proportion of teachers in private schools who were engaged on part-time basis.

The distribution of entitlements by length of service shows that the majority of teachers were entitled to the standard package of entitlements regardless of the length of service. This is an indication that 7.5 percent of the teachers in the 0-5 years length of service who reported to have no entitlements may have just not known what they were entitled to. The reason for this would be that they were still new in the teaching service and therefore did not have the full information about their conditions of service.

The retired/part-time category was created to factor out a certain proportion of respondents who had retired from the teaching service and were back again on part-time as well as those who held other jobs elsewhere but were doing some part-time teaching. This is because the question on the number of entitlements was asked in relation to the current teaching job. None of these teachers qualified for any entitlement and so answered none to the question.

teachers in government schools reported receiving their salaries one to two weeks later than the instituted pay day.

3.1.4 Monthly Income from Other Sources

Income from other sources was defined in the study as income of spouse, income from other household members and income from coping strategies. In the questionnaire, income from coping strategies was collected under income from other sources. Table 2.7 below presents mean, median, maximum and minimum monthly incomes from others sources.

Table 2.7: Mean, Median, Minimum and Maximum Monthly Incomes from Other Sources (Kwacha)

	Mean	Median	Minimum	Maximum
Income of spouse	305,362	195,000	90,000	1,200,000
Income from other household members	178,076	100,000	15,000	700,000
Income from coping strategies	388,188	100,000		

Of all the teachers who had spouses, only a third had income-earning spouses. Income of spouse was defined as monthly 'take home pay' earned by spouses in their formal economic activity, that is, their monthly net incomes. According to the table, the mean monthly income of spouses was K305, 362 and median was K195, 000. These figures are higher than those obtained for all the teachers in the sample. This indicates that the teachers with income-earning spouses were in a better position regarding income than those who did not have such spouses. However, considering that these were only about a third, this has no appreciable effect on the majority of teachers.

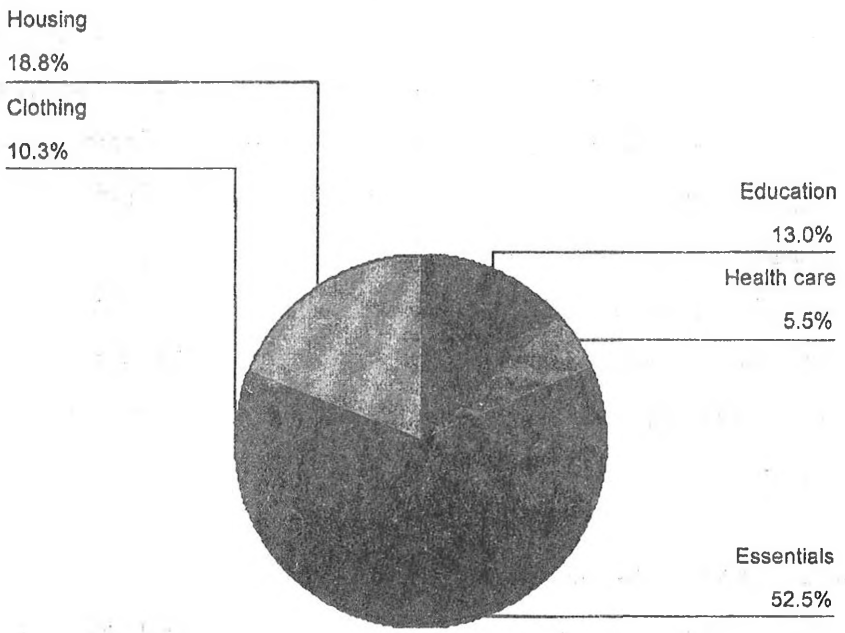
In households where there were members other than the spouse earning income, information was collected as to how much this source of income contributed to household income monthly. Only 5.7 percent of the teachers received income from other household members. This income ranged from K15, 000 to K700, 000 with a mean and median of K178, 076 and K100, 000, respectively.

Information collected on income from coping strategies indicates that 62.4 percent of the teachers in the sample earned income from coping strategies. The mean monthly income from the various coping strategies was K388, 188 and median K100, 000. Considering the proportion of teachers engaged in various coping strategies, it shows that this was the

estimated or they completely do away with some of the items in the Food Basket of commodities. It may also indicate that they buy from cheaper sources, consume more from their own produce, or simply substitute other less expensive items.

Figure 2.3 shows the proportion of the components of expenditure in total household expenditure. Expenditure on essentials accounted for 52.7 percent of total household expenditure. This result is close to the CSO Living Conditions Survey (1998) finding of 59.0 percent.

Figure 2.3: Percentage Distribution of Components of Total Expenditure



Living Conditions Monitoring Surveys (1996 and 1998) by CSO have revealed that people with low incomes spend the largest share of their monthly income on food. Therefore the highest expenditure on essentials by the teachers is an indication that they belong to the low-income group in society. The lowest proportion spent on health care (5.5 percent) in a country with an increasing disease burden is not a sign of good health but rather an indication of the high opportunity cost of spending on health care in relation to other expenses, especially food.

Expenditure on housing was estimated at 18.7 percent, followed by education at 13.0 percent and clothing at 10.2 percent. The proportion of education expenses in total

However, when comparing income with expenditures, the notion of '*psychic income*' should be taken into consideration. Although in this study monetary values of psychic income have not been computed, they do contribute significantly to the living conditions of teachers. In the case of primary school teachers, psychic income may arise from school-provided accommodation, smaller class sizes, number of classes taught, length of vacations and any factors related to conditions of work.

According to the analysis of findings in Section 2.1.4, a number of teachers in rural schools had school-provided accommodation within school premises. This indicates that such teachers were better off income-wise in that the provided accommodation reduced their expenditure on transport as well as time and energy costs of commuting between work place and residence. It also eliminated search costs of accommodation and expenditure on rentals.

In terms of class sizes and on the basis of the sample, in government schools the average class sizes for lower primary was 42 pupils and 44 pupils for upper primary. In private schools, the average class size at lower primary school was 26 pupils and 23 pupils at upper primary school. Therefore, private schools had smaller class sizes and therefore lower pupil-teacher ratios than government schools. The implication as regards psychic income is that teachers in private schools were better off income-wise than teachers in government schools because they had lesser classroom responsibilities given their incomes.

The information collected on number of classes taught per teacher shows that the average number of classes per teacher in a government school was two compared to one in private schools. This also indicates that teachers in government schools derived less psychic income due to more work responsibilities than those of private school teachers.

3.4 Self-assessed Poverty

While income and expenditure levels are the basic indicators of assessing people's ability in meeting needs, it is also of importance to try and find out how school teachers assess themselves in relation to their ability in meeting their basic needs. This gives rise to self-assessment of one's poverty level. Self-assessed poverty is a subjective measure but it

assessed poverty are still high and therefore support the overall finding that a very large percentage of teachers consider themselves to be poor.

Table 3.1: Percentage Distribution of Self-assessed Poverty by School Type, School Location, Sex, Age Group, Net Income Group and Ability to Meet Needs on Basis of Salary

	Self-assessed poverty		
	Not poor	Moderately poor	Very poor
School Type			
Government	9.7	60.7	29.8
Private	24.0	72.0	4.0
School Location			
Rural	16.5	59.5	24.0
Urban	10.7	65.1	24.2
Sex			
Male	9.6	57.8	32.5
Female	14.5	66.2	19.3
Age Group			
20-24	20.0	80.0	-
25-29	14.9	65.7	19.4
30-34	5.3	68.4	26.3
35-39	21.4	45.2	33.3
40-44	8.3	69.4	19.4
45-49	-	70.0	30.0
50-54	12.5	62.5	25.0
55-59	-	50.0	50.0
Net Income Group			
0-99,000	-	83.3	16.7
100,000-199,999	8.9	62.6	27.9
200,000-299,999	30.0	65.0	5.0
300,000-399,999	66.7	33.3	-
400,000 and above	33.3	66.7	-
Ability to Meet Needs			
Yes	50.0	25.0	25.0
No	12.0	63.8	24.1

An examination of self-assessed poverty by age group reveals that in general the level of self-assessed poverty increases with age group. Teachers within the 20-24 years age group constituted the highest proportion of teachers who considered themselves to be not poor, and teachers in the 50-59 years age group constituted the highest proportion of teachers who considered themselves to be very poor. Generally, the older someone is, the more responsibilities they may have, e.g., large number of children, taking care of orphans, etc. Therefore the needs that are required to be met are greater, given the level of income. Since the majority of teachers are not able to meet their needs on the basis of their income, teachers with greater responsibilities are worst affected.

Self-assessed poverty by income group shows that none of the teachers falling in the 0-K99, 000 income group considered themselves to be among the non-poor, while none of the teachers in the income group above K300, 000 considered themselves to be very poor. Overall, the pattern revealed by these findings is that the level of self-assessed poverty declines with higher income groups. However, a surprising finding was that 66.7

spouse earning low wages and for other. This is clear indication that the majority of primary school teachers in the sample perceive that they cannot afford the rising cost of living on the basis of their current monthly incomes. However, a strange result is that a large proportion (84.8 percent) of those who reported being able to meet their needs on the basis of their salaries still attributed their being poor to low wages.

Moreover, the study identified additional practices that hinder the sustainable livelihood of teachers. For example, equal remuneration of teachers in government schools regardless of length of service entails that experience and dedicated long service is not recognised and therefore goes unrewarded. Similarly, there is no distinction in remuneration of teachers in government schools on the basis of higher qualifications. According to findings of the study, teachers with diplomas were paid the same salaries as the teachers with certificates. Entitlements like leave benefits, and loans that come with the teaching job are rarely honoured. Recently, it has become a common phenomenon for teachers to receive their salaries late.

The practices outlined above not only affect the teaching morale of teachers but also enhance poverty among primary school teachers, thereby hindering sustainable livelihood.

The 'other' coping strategy constituted a wide range of strategies such as growing one's own food stuffs, carpentry, tailoring, small scale farming and so on. These put together gives the highest percentage (26.8 percent). Analysis of coping strategies according to school type shows that for government primary school teachers, offering private tuition was one of the major strategies, followed by vending. Reducing food intake and informal borrowing each occupies the same position. For teachers in private schools, seeking help from relatives and friends is the most utilized coping strategy, followed by formal borrowing. This formal borrowing is not usually from commercial banks. Rather it is from revolving funds set up in most private schools as well as government schools, but to a lesser extent in the latter. In both government and private schools, Parents Teachers Association (PTA) funds are used to assist teachers in emergencies in form of soft loans. These are the main sources of formal borrowing in primary schools.

The analysis of coping strategies in both types of schools shows that compared to private schools, coping strategies for teachers in government schools may have more adverse effects on teachers' performance in class. For instance, reducing food intake poses a danger to the health of teachers as well as that of their household members and may affect the attendance of teachers at work. While informal borrowing may alleviate the situation in the short-run, in the long run it may leave teachers with heavy debts due to the high interest rates, usually not less than 100 percent, charged on these kind of loans (*Kaloba*). This may further worsen the income levels of the teachers and create a vicious circle. Consequently their performance in class may be affected. (Private tuition as a coping strategy and its potential effects are analysed in the next section of this study).

The analysis of coping strategies according to net income categories also reveals similar statistics concerning the most utilized coping strategies. However, an interesting picture in this analysis is that particular coping strategies tended to be less utilized with a rise in net income category. Cases in point are informal borrowing, seeking help from relatives and friends, selling household assets, and informal borrowing. This would seem to imply that if primary school teachers were given higher incomes that are sufficient to meet their basic needs, they would engage in less coping activities and therefore concentrate more on their core function of teaching.

pupils, thereby enhancing the understanding of classroom material by the pupils. Private tuition can also be unfavourable especially when a teacher offers it to his or her own class pupils. This is so because there is the danger that it would be an incentive for some teachers not to cover materials adequately in class so that pupils must later seek private tuition at an additional fee.

Since one of the objectives of the study is to assess the extent of the relationship between the poverty levels of primary school teachers and their output, private tuition as a coping strategy is analysed further. The study collected information from teachers using private tuition as their main coping strategy on whether tuition is offered to students from their own formal class. Information was also collected on the number of private tuition pupils each teacher had.

According to the findings, the classes for private tuition ranged from one pupil to a maximum of 22 pupils. Of teachers who used private tuition as their main coping strategy, about 80 percent reported to offer private tuition to their own pupils. The charge for tuition on average was about K1, 500 per hour. In cases where tuition was charged on monthly basis, the charges were as high as K50, 000 per month. Considering that this information was collected at the beginning of the first term, it is likely that the fees charged may even be higher during examination periods. Therefore there are incentives for teachers to have many pupils for private tuition in order to earn some extra income to narrow the gap between their salaries and their household expenditures. While this would be beneficial for pupils who can afford to pay for tuition, it would be detrimental to those who cannot afford and therefore may impact adversely on the overall quality of education.

5.2 Pupil - Teacher Ratios and Average Pass Rates

Using information on total number of pupils and total number of teachers in each of the schools in the sample, pupil-teacher ratios were computed for each school. High pupil-teacher ratios affect the effectiveness by which a teacher is able to communicate with the pupils in class. The officially approved class size is 45. Given the impact that the poverty situation has had on primary school teachers, the existence of high pupil-teacher ratios is likely to worsen the performance of teachers in their duties and therefore affect

Information in the table shows that overall, private schools had higher pass rates for their grade seven students than government schools. On the basis of the sample, in private schools the pass rates were above 40.0 percent, with 70.6 percent of the private schools reporting pass rates over 60.0 percent. In government schools however, only 11.2 percent of the schools had pass rates over 60.0 percent while 34.3 percent had pass rates below 20.0 percent. This is an indication that there is higher performance of pupils in private schools than in government schools.

Analysis of pupil teacher ratios shows that 76.4 percent of the government schools in the sample had class sizes larger than 45 pupils (official class size) while none of the private schools had class sizes exceeding 45 pupils. In fact most of the private schools in the sample had class sizes below 20 pupils. This difference of course is due to economic considerations. Government schools are more affordable than private schools. Therefore, there is pressure in government schools to over-enroll. However, large classes have negative implications on the delivery of quality education. Therefore in a situation where a teachers have been demoralised due to poor living conditions, the impact on education quality would be more adverse.

The relationship between poverty levels of teachers and their output was analysed by relating their monthly net income with some performance indicators discussed above. The findings are presented in table 5.3.

Analysis of average pass rates according to net incomes of teachers shows that there is a correlation between low pass rates and low incomes. The proportion of teachers within the 0-K99, 000 income category in relation to pass rates is an outlier case and therefore can be ignored under this analysis. This represents the untrained teachers who had lowest incomes in private schools.

According to the findings in Table 5.3, there was no correlation between teachers' incomes exceeding K200, 000 and average pass rates to secondary school below 40.0 percent. Also high-income levels were correlated with high pass rates. This is an indication that low-income levels have a negative effect on the quality of education in schools.

From the above analysis it is clear that there is a considerable relationship between teachers' living conditions and their output. The poor living conditions of the majority of teachers has an adverse impact on the quality of education provided.

most important measure in uplifting primary school teachers living conditions. Analysis by school type also shows the same order of importance.

As regards to who should assist primary school teachers in uplifting their living conditions, 81.4 percent of the teachers stated that the government should assist primary school teachers, while 10.3 percent suggested that school management should assist teachers. Further, 4.4 percent suggested that teachers as a collective should help while 2.9 percent stated that it was up to the individual teachers to assist themselves. A very small proportion of teachers (1.0 percent) suggested 'other' as the source of help. The 'other' mainly comprised donors and Non-Governmental Organisations (NGOs).

Analysis by school type shows that in private schools, school management was seen as the most important key player (53.8 percent) as opposed to government schools where it was the government itself that was seen as key. This is not surprising because private schools fall directly under the responsibility of private management while government schools fall under the responsibility of the government.

From these findings concerning who should assist teachers realise the attainment of sustainable livelihood, it is clear that the government is viewed by the majority of primary school teachers as a key player.

additional income. It is very significant, however, that this was much more of an exception than a rule for the sample of teachers interviewed. A major revelation from the study was the issue of *psychic income*. It was believed that teachers who had access to affordable government or school provided accommodation were better placed in terms of the energy and time saved in searching for survival means. This is because a large part of many teachers' income is being spent in house rentals and transport. Many of these teachers were those in rural areas where accommodation was relatively cheap and/or provided by the school authorities.

Due to the teachers' inability to afford basic necessities, the majority of them have resorted to other survival means in order to cope with the poverty situation. Notably, these are: private tuition, vending, reducing the number of meals per day, asking for help from friends and relatives, and borrowing, both formal and *kaloba* (an informal borrowing with exorbitant interest rates, often exceeding 100.0 percent). Many of these strategies have negative ramifications on the quality of education, as they are likely to distract the teachers from concentrating in their work. For instance, private tuition, while it may be a welcome strategy because of the additional attention devoted to the pupils, may significantly undermine the quality of education if it is conducted to the teachers' own pupils. This is because, lucrative as it is, particularly during examination periods, this could be an incentive for the teacher not to cover enough material in class just to lure the pupils to go for private tuition at a higher fee. Other coping measures have similar consequences in that they take up the teachers' time and sap their energy in the quest to augment their meager wages. This may be particularly so for petty vending, which usually takes up a lot of time.

Despite the fact that teachers qualify for a number of entitlements, such as leave benefits, social security and many allowances including housing and health, very few of them have benefited from these entitlements. In fact it was their major concern that whilst these benefits appear on paper, they are not applied in practice. Teachers are left to wonder whether they are really indeed supposed to benefit from them. It is therefore not clear what the government policy is regarding such entitlements. Teachers expressed dismay over the non-payment of leave benefits when they go on leave. This concern was mainly raised by teachers in government schools.

- Definitive attention must be paid to honour allowances contractually due to the teacher. Specifically, accommodation, transport, health, and other benefits should be paid. This will no doubt increase the teachers' *psychic income* and therefore their ability to focus time and attention on improved teaching. Psychic incomes will in turn enable them to save both energy and time expended when engaged in other coping strategies. Moreover, they will have enough time to enjoy leisure. This way the teachers' sustainable livelihood will be assured even though actual incomes are not necessarily raised. This has the potential of enhancing pupils' pass rates.

- Government and private school sponsors should consider additional ways of improving teachers' condition of service. Two ways that are suggested are:
  (a) Teachers may be offered free or subsidised education for their children in the school where they are employed (some schools even now are doing this).
  (b) In rural areas, teachers may also obtain produce from the self-help farms run by the schools.

- Whilst private tuition has its merits, there is an overriding problem with the practice as a supplementary source for teachers' income. In so far as it may act as an incentive for teachers to leave much work so as to encourage school children to pay for private tuition, it poses a great danger to the advancement of the education system. This is because pupils that are not able to afford the very high fees charged may be disadvantaged. To curb this practice the government may consider instituting measures such as making teachers sign a declaration that they will not give private tuition to their own pupils. If this declaration is abrogated, appropriate action would be taken. This undertaking is working in some private schools where it has been applied. However, this measure may admittedly involve a major change in both the culture of teachers' practices and the consistency of governments' actions.

In conclusion, it is clear from this study that the improvement of teachers' overall conditions of service is central in the entire education system reform process. It requires a multifaceted approach and full commitment by all stakeholders.

REFERENCES

CSO. (1996) *Living Conditions Monitoring Survey Report.* Lusaka.

---------- (1998) *Living Conditions In Zambia Preliminary report.* Lusaka.

GRZ. (1996) *Educating our Future: National Policy on Education.* Lusaka.

---------- (1999) *Economic Report, Ministry of Finance and Development.* Lusaka.

JCTR. *Food Basket Survey.* March 2000. Lusaka.

Levin H. M and Lockheed M.E., *"Problems currently faced by Schools in Developing Countries".*

Kelly, M.J., ed. (1999) *The Origins and Development of Education in Zambia: Pre-colonial Times to 1996.* Lusaka: Image Publisher.

Mtonga J. R, (1998), *'Teachers have been ignored'.* Letter to the editor. National Mirror. August 23-29, 1998. Lusaka.

Seshamani V. (1999), *Some Analytical Observations on the Challenge of Poverty in Zambia.* Paper presented to a public forum sponsored by JCTR. Lusaka.

Appendix B

COST OF LIVING STUDY

PRIMARY SCHOOL TEACHERS' QUESTIONNAIRE

Dear Respondent,

This study is being conducted by the Social and Economic Development Research Project of the Jesuit Centre for Theological Reflection (JCTR) to find out the living conditions of primary school teachers in Lusaka. You are cordially asked to provide information on the questions contained in this questionnaire. Your responses will be treated with utmost **confidentiality**.

IDENTIFICATIONS		
	CATEGORY	**CODE**
Name of school	.....	[ ]
Type of school	Government.....1 Private.....2 Grant aided.....3	[ ] [ ] [ ]
Grade of school	Basic.....1 Middle Basic....2 Lower Basic.....3 Other (specify).4	[ ] [ ] [ ] .....[ ]
Rural/Urban	Rural.....1 Urban.....2	[ ] [ ]

DATA COLLECTION	
Interviewer:.....	**Date:**...../...../.....
Supervisor:.....	**Checking Date**..../...../.....

DATA ENTRY	
Operator:.....	**Entry Date:**...../...../.....
Supervisor:.....	**Editing Date:**...../...../.....

		Private...2 [ ] Mission...3 [ ] Community...4 [ ] Other (specify)5.....	
207	What was the main reason for separation with your previous employer?	Low pay...1 [ ] No entitlements (e.g. loans)...2 [ ] No professional progression...3 [ ] Lost job...4 [ ] Other (specify)5.....	
208	How do you view your current employer compared to the previous one?	Much better...1 [ ] Better...2 [ ] The same...3 [ ] Worse...4 [ ] Much worse...5 [ ]	

Section 3: Household income

No.	Questions and Filters	Coding categories	Skip to
301	What is your current gross salary including allowances?	K.....	
302	What is your usual net ('take home') salary including allowances?	K.....	
303	CHECK MARITAL STATUS If married, what is your spouse's current gross salary including allowances?	K..... Don't know N/A	 >>305 >>305
304	If married, your spouse's usual net ('take home') salary including allowances?	K..... Don't know N/A	 >>305 >>305
305	How much income does your household receive from other household members (excluding spouse)?	K.....	
306	How much income does your household earn from other sources?	Rent K..... Remittances K..... Insurance K..... Scholarship K..... Vending K..... Other K.....	

Section 4: Household expenditure

No.	Questions and Filters	Coding categories	Skip to
	Education and Health Care Expenditure		
401	How much was spent by your household on the following during the current school term…?		
	- School fees (exam fees included)…	K.....	
	- School uniforms (including shoes, socks, ties etc)…	K.....	
	- Contribution to school/PTA	K.....	
	- Private tuition…	K.....	
	- Books and stationery…		

		K.....	
	- Water	K.....	
	- Electricity	K.....	
	- Candles	K.....	
	- Paraffin	K.....	
	- Diesel/Petrol	K.....	
	- Charcoal	K.....	
	- Firewood	K.....	
	- Home repairs (plumbing, painting etc)	K.....	
	- Telephone	K.....	
	- Cable/pay TV	K.....	
	TOTAL EXPENCES ON HOUSING (Interviewer must add up)	K.....	

Section 5: Teaching and coping strategies

No.	Questions and Filters	Coding categories	Skip to
	Class Preparation		
501	How many classes do you take per day?	Enter number of classes... [ ]	
502	What grade(s) do you take for lessons?	Grade 1...1 [ ] Grade 2...2 [ ] Grade 3...3 [ ] Grade 4...4 [ ] Grade 5...5 [ ] Grade 6...6 [ ] Grade 7...7 [ ]	
503	**LENGTH OF SESSIONS** How much teaching time do you spend with your class(es)?	Enter number of hours ...[|]	
504	How much time do you require for lesson planning per class/day?	Enter number of hours ...[|]	
505	Do you think the time spent on lesson planning is adequate?	Yes...1 [ ] No...2 [ ]	
506	Do you think that the amount of time you put into your teaching matches your remuneration?	Yes...1 [ ] No...2 [ ]	
507	Do you participate in the Academic Production Unit (APU) programme?	Yes...1 [ ] No...2 [ ]	
	Poverty and coping strategies		
508	Is your household able to meet all your monthly needs on the basis of your salary/allowances?	Yes...1 [ ] No...2 [ ]	>>
509	ASK FOR THE MAIN COPING STRATEGY Which of the following ways do you have to rely on in order to cater for your household needs?	Offer private tuition ...1 [ ] Informal borrowing (Kaloba)...2 [ ] Formal borrowing...3 [ ] Reducing food intake i.e. missing certain meals ...4 [ ] Selling household assets ...5 [ ] Petty vending...6 [ ] APU...7 [ ] Seek help from relatives and friends...8 [ ] Other main(specify) .....9 [ ]	513 ▶

Appendix C

COST OF LIVING STUDY

PRIMARY SCHOOL HEAD TEACHERS' QUESTIONNAIRE

Dear Respondent,

This study is being conducted by the Social and Economic Development Research Project of the Jesuit Centre for Theological Reflection (JCTR) to find out the living conditions of primary school teachers in Lusaka. You are cordially asked to provide information on the questions contained in this questionnaire. Your responses will be treated with utmost **confidentiality.**

IDENTIFICATION		
	CATEGORY	CODE
Name of school	....	[|]
Type of school	Government.....1 Private.....2 Grant aided.....3	[ ] [ ] [ ]
Grade of school	Basic.....1 Middle Basic....2 Lower Basic.....3 Other (specify).4	[ ] [ ] [ ] [ ]
Rural/Urban	Rural.....1 Urban.....2	[ ] [ ]

DATA COLLECTION	
Interviewer:.....	Date:...../...../.....
Supervisor:.....	Checking Date...../...../.....
DATA ENTRY	
Operator:.....	Entry Date:...../...../.....
Supervisor:.....	Editing Date:...../...../.....

Appendix D- Independent Sample Tests for Mean Differences

Independent Samples Test – Male/Female

			Gross income		Net income	
			Equal variances assumed	Equal variances not assumed	Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F		4.278		1.923	
	Sig.		.040		.167	
t-test for Equality of Means	t		1.236	1.151	.970	.923
	df		223	135.511	226	146.602
	Sig. (2-tailed)		.218	.252	.333	.358
	Mean Difference		13213.1758	13213.1758	8874.0253	8874.0253
	Std. Error Difference		10686.3201	11484.3830	9147.2911	9616.6060
	95% Confidence Interval of the Difference	Lower Upper	-7845.9167 34272.2682	-9498.6249 35924.9765	-9150.8604 26898.9109	-10131.0601 27879.1107

Independent Samples Test – Government/Private

			Gross income		Net income	
			Equal variances assumed	Equal variances not assumed	Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of Variances	F		214.331		195.689	
	Sig.		.000		.000	
t-test for Equality of Means	t		-8.692	-4.682	-10.207	-5.594
	df		223	48.434	226	49.680
	Sig. (2-tailed)		.000	.000	.000	.000
	Mean Difference		-93925.3239	-93925.3239	-90014.1685	-90014.1685
	Std. Error Difference		10806.3722	20062.7596	8818.4851	16090.4353
	95% Confidence Interval of the Difference	Lower Upper	-115220.9982 -72629.6496	-134254.8741 -53595.7736	-107391.1366 -72637.2005	-122337.9128 -57690.4243

2000-06

COST OF LIVING OF PRIMARY SCHOOL TEACHERS: THE CASE OF LUSAKA PROVINCE

Nakamba, Mambwe P

Jesuit Centre for Theological Reflection